March 13, 2013

Duke Energy
Miami Fort Generating Station
11021 Brower Road
North Bend, OH 45052

Attention: Mr. Michael Byrd
Environmental Coordinator

Re: Results – **February 2013**
Low-Level Mercury Sampling
Miami Fort Generating Station
North Bend, Ohio

In accordance with your request, URS prepared the following letter report transmitting low-level mercury test results for samples collected at the Miami Fort Generating Station located in North Bend, Ohio.

The scope of work involved the sampling of intake and discharge waters from the following sources and analysis of those samples for low-level mercury.

1. River Intake
2. Station 601 (WWT Influent)
   [Samples were collected at this station one detention time (approximately 14 hours as specified by Duke Energy) before samples collected at Outfall 608]
3. Outfall 608 (WWT Effluent)
   [Samples were collected at this outfall one detention time (approximately 14 hours as specified by Duke Energy) after samples collected at station 601]
4. Outfall 002 (Pond B Discharge)

Each sample was collected following the required Method 1669: *Sampling Ambient Water for Determination of Trace Metals at EPA Water Quality Criteria Levels* (Sampling Method) and analyzed by Method 1631E. At the request of Duke Energy, a dissolved low-level mercury sample was collected by Method 1669 from Outfall 608 and analyzed by Method 1631E. The collected dissolved sample was filtered at the laboratory utilizing 0.45 micron filtration.

Field staff from URS' Cincinnati office conducted the sampling and TestAmerica Laboratories Inc. located in North Canton, Ohio performed the analytical procedures. The analytical procedures included the analyses of a collected sample and duplicate sample (duplicates collected at Outfall 608 and Outfall 002), field blank (field blanks collected at the River Intake, Outfall 608, and Outfall 002), and trip blank.

URS Corporation
525 Vine Street, Suite 1800
Cincinnati, Ohio 45202
Tel: 513.651.3440
Fax: 1.877.660.7720 (toll free)

The results from the **February 4 and 5, 2013** sampling events are presented in the attached Table 1. A copy of the laboratory report is enclosed with this letter.

--ooOoo--

URS is pleased to provide continued assistance to Duke Energy in the execution of their environmental monitoring requirements. If there are any questions regarding the content of this report, please do not hesitate to contact the undersigned.

Sincerely,

URS Corporation

Michael A. Wagner
Project Manager

Dennis P. Connair, C.P.G.
Principal

MAW/DPC/Duke Energy-MFS LL Hg 2013
Job No. 14951061

TABLE 1

ANALYTICAL RESULTS
LOW-LEVEL MERCURY
RIVER INTAKE, STATION 601, OUTFALL 608, AND OUTFALL 002 (POND B)

DUKE ENERGY - MIAMI FORT STATION
NORTH BEND, OHIO

	Date Sampled / Results (ng/L, parts per trillion)					
Sample ID	**1/2-3/2013**	**2/4/13**	**3/xx/2013**	**4/xx/2013**	**5/xx/2013**	**6/xx/2013**
River Intake	4.1	15				
Station 601 (7)	730,000	320,000				
Station 601 (7) [duplicate]	Not Collected	Not Collected				
Station 601 (8)	330,000	370,000				
Station 601 (8) [duplicate]	Not Collected	Not Collected				
Outfall 608	50	54				
Outfall 608 [duplicate]	46	55				
Outfall 608 [dissolved, 0.45 micron]	0.63	<0.50				
APB-002	5.1	9.1				
APB-002 [duplicate]	5.3	9.3				
Field Blank (RI-FB)	1.0	1.2				
Field Blank (WWT-FB)	<0.50	<0.50				
Field Blank (AP-FB)	<0.50	<0.50				
Trip Blank	<0.50	<0.50				

Samples collected by URS (Method 1669)
Sampling times are noted within the associated laboratory report for each collected sample
Samples analyzed by TestAmerica of North Canton, Ohio (Method 1631E).

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-20701-1
Client Project/Site: Miami Fort LLHg 2013 - J13020158

For:
Duke Energy Corporation
139 East Fourth Street
Cincinnati, Ohio 45202

Attn: Ms. Sue Wallace

Denise Pohl

Authorized for release by:
2/20/2013 2:58:13 PM

Denise Pohl
Project Manager II
denise.pohl@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-20701-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Duke Energy Corporation

Project: Miami Fort LLHg 2013 - J13020158

Report Number: 240-20701-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 02/06/2013; the samples arrived in good condition, properly preserved and where needed on ice. The temperature of the cooler at receipt was 14.6 C.

DISSOLVED LOW LEVEL MERCURY

Sample 608 WWT DISSOLVED (240-20701-9) was analyzed for dissolved low level mercury in accordance with EPA Method 1631E. The samples were prepared on 02/06/2013 and analyzed on 02/07/2013.

No difficulties were encountered during the Low Level Mercury analysis.

All quality control parameters were within the acceptance limits.

LOW LEVEL MERCURY

Samples RI FB (240-20701-1), RI (240-20701-2), 601(7) WWT (240-20701-3), 601(8) WWT (240-20701-4), TB (240-20701-5), 608 WWTFB (240-20701-6), 608 WWT (240-20701-7), 608 WWT DUP (240-20701-8), OUTFALL 002 FB (240-20701-10), OUTFALL 002 (240-20701-11) and OUTFALL 002 DUP (240-20701-12) were analyzed for Low Level Mercury in accordance with EPA Method 1631E. The samples were prepared on 02/07/2013 and analyzed on 02/08/2013.

Mercury failed the recovery criteria low for the MS of sample OUTFALL 002 DUPMS (240-20701-12) in batch 240-74840.

Job ID: 240-20701-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Refer to the QC report for details.

Samples 601(7) WWT (240-20701-3)[50000X], 601(8) WWT (240-20701-4)[80000X], 608 WWT (240-20701-7)[10X] and 608 WWT DUP (240-20701-8)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Low Level Mercury analyses.

All other quality control parameters were within the acceptance limits.

Method Summary

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	TAL NC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-20701-1	RI FB	Water	02/04/13 17:20	02/06/13 08:50
240-20701-2	RI	Water	02/04/13 17:25	02/06/13 08:50
240-20701-3	601(7) WWT	Water	02/04/13 17:45	02/06/13 08:50
240-20701-4	601(8) WWT	Water	02/04/13 17:55	02/06/13 08:50
240-20701-5	TB	Water	02/05/13 00:00	02/06/13 08:50
240-20701-6	608 WWTFB	Water	02/05/13 08:30	02/06/13 08:50
240-20701-7	608 WWT	Water	02/05/13 08:35	02/06/13 08:50
240-20701-8	608 WWT DUP	Water	02/05/13 08:40	02/06/13 08:50
240-20701-9	608 WWT DISSOLVED	Water	02/05/13 08:45	02/06/13 08:50
240-20701-10	OUTFALL 002 FB	Water	02/05/13 09:00	02/06/13 08:50
240-20701-11	OUTFALL 002	Water	02/05/13 09:05	02/06/13 08:50
240-20701-12	OUTFALL 002 DUP	Water	02/05/13 09:10	02/06/13 08:50

Detection Summary

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: RI FB — Lab Sample ID: 240-20701-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	1.2		0.50		ng/L	1		1631E	Total/NA

Client Sample ID: RI — Lab Sample ID: 240-20701-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	15		0.50		ng/L	1		1631E	Total/NA

Client Sample ID: 601(7) WWT — Lab Sample ID: 240-20701-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	320000		25000		ng/L	50000		1631E	Total/NA

Client Sample ID: 601(8) WWT — Lab Sample ID: 240-20701-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	370000		40000		ng/L	80000		1631E	Total/NA

Client Sample ID: TB — Lab Sample ID: 240-20701-5

No Detections

Client Sample ID: 608 WWTFB — Lab Sample ID: 240-20701-6

No Detections

Client Sample ID: 608 WWT — Lab Sample ID: 240-20701-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	54		5.0		ng/L	10		1631E	Total/NA

Client Sample ID: 608 WWT DUP — Lab Sample ID: 240-20701-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	55		5.0		ng/L	10		1631E	Total/NA

Client Sample ID: 608 WWT DISSOLVED — Lab Sample ID: 240-20701-9

No Detections

Client Sample ID: OUTFALL 002 FB — Lab Sample ID: 240-20701-10

No Detections

Client Sample ID: OUTFALL 002 — Lab Sample ID: 240-20701-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	9.1		0.50		ng/L	1		1631E	Total/NA

Client Sample ID: OUTFALL 002 DUP — Lab Sample ID: 240-20701-12

This Detection Summary does not include radiochemical test results.

Client Sample ID: OUTFALL 002 DUP (Continued)

Lab Sample ID: 240-20701-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Mercury	9.3		0.50		ng/L	1		1631E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: RI FB
Date Collected: 02/04/13 17:20
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-1
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.2		0.50		ng/L		02/07/13 14:06	02/08/13 13:09	1

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: RI
Date Collected: 02/04/13 17:25
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-2
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	15		0.50		ng/L		02/07/13 14:06	02/08/13 13:13	1

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: 601(7) WWT
Date Collected: 02/04/13 17:45
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-3
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	320000		25000		ng/L		02/07/13 14:06	02/08/13 13:17	50000

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: 601(8) WWT
Date Collected: 02/04/13 17:55
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-4
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	370000		40000		ng/L		02/07/13 14:06	02/08/13 13:32	80000

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: TB
Date Collected: 02/05/13 00:00
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-5
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50		ng/L		02/07/13 14:06	02/08/13 13:37	1

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: 608 WWTFB
Date Collected: 02/05/13 08:30
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-6
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50		ng/L		02/07/13 14:06	02/08/13 13:41	1

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: 608 WWT
Date Collected: 02/05/13 08:35
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-7
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	54		5.0		ng/L		02/07/13 14:06	02/08/13 13:47	10

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: 608 WWT DUP
Date Collected: 02/05/13 08:40
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-8
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	55		5.0		ng/L		02/07/13 14:06	02/08/13 13:51	10

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: 608 WWT DISSOLVED
Lab Sample ID: 240-20701-9
Date Collected: 02/05/13 08:45
Matrix: Water
Date Received: 02/06/13 08:50

Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50		ng/L		02/06/13 14:34	02/07/13 12:41	1

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: OUTFALL 002 FB
Date Collected: 02/05/13 09:00
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-10
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50		ng/L		02/07/13 14:06	02/08/13 13:55	1

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: OUTFALL 002
Date Collected: 02/05/13 09:05
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-11
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	9.1		0.50		ng/L		02/07/13 14:06	02/08/13 13:59	1

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Client Sample ID: OUTFALL 002 DUP
Date Collected: 02/05/13 09:10
Date Received: 02/06/13 08:50

Lab Sample ID: 240-20701-12
Matrix: Water

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	9.3		0.50		ng/L		02/07/13 14:06	02/08/13 14:03	1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 240-74496/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 74649 — **Prep Batch: 74496**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50		ng/L		02/06/13 13:41	02/07/13 10:40	1

Lab Sample ID: LCS 240-74496/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 74649 — **Prep Batch: 74496**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			5.00	4.05		ng/L		81	77 - 123		

Lab Sample ID: MB 240-74646/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 74840 — **Prep Batch: 74646**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50		ng/L		02/07/13 14:06	02/08/13 12:51	1

Lab Sample ID: LCS 240-74646/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 74840 — **Prep Batch: 74646**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			5.00	4.04		ng/L		81	77 - 123		

Lab Sample ID: 240-20701-12 MS — **Client Sample ID: OUTFALL 002 DUP**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 74840 — **Prep Batch: 74646**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	9.3		5.00	12.8	F	ng/L		69	71 - 125		

Lab Sample ID: 240-20701-12 MSD — **Client Sample ID: OUTFALL 002 DUP**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 74840 — **Prep Batch: 74646**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	9.3		5.00	13.4		ng/L		80	71 - 125	4	24

Lab Sample ID: PB 240-74493/1-B PB — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 74649 — **Prep Batch: 74496**

Analyte	PB Result	PB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50		ng/L		02/06/13 13:41	02/07/13 11:51	1

Metals

Prep Batch: 74496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-20701-9	608 WWT DISSOLVED	Dissolved	Water	1631E	
LCS 240-74496/2-A	Lab Control Sample	Total/NA	Water	1631E	
MB 240-74496/1-A	Method Blank	Total/NA	Water	1631E	
PB 240-74493/1-B PB	Method Blank	Dissolved	Water	1631E	

Prep Batch: 74646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-20701-1	RI FB	Total/NA	Water	1631E	
240-20701-2	RI	Total/NA	Water	1631E	
240-20701-3	601(7) WWT	Total/NA	Water	1631E	
240-20701-4	601(8) WWT	Total/NA	Water	1631E	
240-20701-5	TB	Total/NA	Water	1631E	
240-20701-6	608 WWTFB	Total/NA	Water	1631E	
240-20701-7	608 WWT	Total/NA	Water	1631E	
240-20701-8	608 WWT DUP	Total/NA	Water	1631E	
240-20701-10	OUTFALL 002 FB	Total/NA	Water	1631E	
240-20701-11	OUTFALL 002	Total/NA	Water	1631E	
240-20701-12	OUTFALL 002 DUP	Total/NA	Water	1631E	
240-20701-12 MS	OUTFALL 002 DUP	Total/NA	Water	1631E	
240-20701-12 MSD	OUTFALL 002 DUP	Total/NA	Water	1631E	
LCS 240-74646/2-A	Lab Control Sample	Total/NA	Water	1631E	
MB 240-74646/1-A	Method Blank	Total/NA	Water	1631E	

Analysis Batch: 74649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-20701-9	608 WWT DISSOLVED	Dissolved	Water	1631E	74496
LCS 240-74496/2-A	Lab Control Sample	Total/NA	Water	1631E	74496
MB 240-74496/1-A	Method Blank	Total/NA	Water	1631E	74496
PB 240-74493/1-B PB	Method Blank	Dissolved	Water	1631E	74496

Analysis Batch: 74840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-20701-1	RI FB	Total/NA	Water	1631E	74646
240-20701-2	RI	Total/NA	Water	1631E	74646
240-20701-3	601(7) WWT	Total/NA	Water	1631E	74646
240-20701-4	601(8) WWT	Total/NA	Water	1631E	74646
240-20701-5	TB	Total/NA	Water	1631E	74646
240-20701-6	608 WWTFB	Total/NA	Water	1631E	74646
240-20701-7	608 WWT	Total/NA	Water	1631E	74646
240-20701-8	608 WWT DUP	Total/NA	Water	1631E	74646
240-20701-10	OUTFALL 002 FB	Total/NA	Water	1631E	74646
240-20701-11	OUTFALL 002	Total/NA	Water	1631E	74646
240-20701-12	OUTFALL 002 DUP	Total/NA	Water	1631E	74646
240-20701-12 MS	OUTFALL 002 DUP	Total/NA	Water	1631E	74646
240-20701-12 MSD	OUTFALL 002 DUP	Total/NA	Water	1631E	74646
LCS 240-74646/2-A	Lab Control Sample	Total/NA	Water	1631E	74646
MB 240-74646/1-A	Method Blank	Total/NA	Water	1631E	74646

Client Sample ID: RI FB

Lab Sample ID: 240-20701-1

Date Collected: 02/04/13 17:20

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		1	74840	02/08/13 13:09	AS	TAL NC

Client Sample ID: RI

Lab Sample ID: 240-20701-2

Date Collected: 02/04/13 17:25

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		1	74840	02/08/13 13:13	AS	TAL NC

Client Sample ID: 601(7) WWT

Lab Sample ID: 240-20701-3

Date Collected: 02/04/13 17:45

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		50000	74840	02/08/13 13:17	AS	TAL NC

Client Sample ID: 601(8) WWT

Lab Sample ID: 240-20701-4

Date Collected: 02/04/13 17:55

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		80000	74840	02/08/13 13:32	AS	TAL NC

Client Sample ID: TB

Lab Sample ID: 240-20701-5

Date Collected: 02/05/13 00:00

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		1	74840	02/08/13 13:37	AS	TAL NC

Client Sample ID: 608 WWTFB

Lab Sample ID: 240-20701-6

Date Collected: 02/05/13 08:30

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		1	74840	02/08/13 13:41	AS	TAL NC

Client Sample ID: 608 WWT

Lab Sample ID: 240-20701-7

Date Collected: 02/05/13 08:35

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		10	74840	02/08/13 13:47	AS	TAL NC

Client Sample ID: 608 WWT DUP

Lab Sample ID: 240-20701-8

Date Collected: 02/05/13 08:40

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		10	74840	02/08/13 13:51	AS	TAL NC

Client Sample ID: 608 WWT DISSOLVED

Lab Sample ID: 240-20701-9

Date Collected: 02/05/13 08:45

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			74496	02/06/13 14:34	AS	TAL NC
Dissolved	Analysis	1631E		1	74649	02/07/13 12:41	AS	TAL NC

Client Sample ID: OUTFALL 002 FB

Lab Sample ID: 240-20701-10

Date Collected: 02/05/13 09:00

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		1	74840	02/08/13 13:55	AS	TAL NC

Client Sample ID: OUTFALL 002

Lab Sample ID: 240-20701-11

Date Collected: 02/05/13 09:05

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		1	74840	02/08/13 13:59	AS	TAL NC

Client Sample ID: OUTFALL 002 DUP

Lab Sample ID: 240-20701-12

Date Collected: 02/05/13 09:10

Matrix: Water

Date Received: 02/06/13 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			74646	02/07/13 14:06	AS	TAL NC
Total/NA	Analysis	1631E		1	74840	02/08/13 14:03	AS	TAL NC

Lab Chronicle

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Duke Energy Corporation
Project/Site: Miami Fort LLHg 2013 - J13020158

TestAmerica Job ID: 240-20701-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAP	5	200004	07-31-13
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-13
L-A-B	DoD ELAP		L2315	07-28-13
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAP	2	OH001	06-30-13
New York	NELAP	2	10975	04-01-13
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Wisconsin	State Program	5	999518190	08-31-13

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Duke Energy	Client Project Manager: Mike Wagner	Site Contact: T. Thomas	Lab Contact:	COC No: 59979
Address: Miami Fort Station	Telephone: 513-651-3440	Telephone: 513 314 8055	Telephone:	1 of 2 COCs
City/State/Zip: N. Bend OHIO	Email: Mike.Wagner@cws.com	Analysis Turnaround Time (CALENDAR DAYS or WORK DAYS)		For lab use only
Phone:	tara.thomas@duke-energy.com	TAT if different from below ☐ contact		Walk-in client ☐
Project Name: Duke Miami Ft CCR 2013	Method of Shipment/Carrier:	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup ☐
Project Number: 14958061	Shipping/Tracking No:			Lab sampling ☐
PO #				Job/SDG No:

Analyses: 6010 Hg

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	6010 Hg	Sample Specific Notes / Special Instructions:
R.I FB	2/4/13	1720											2		N	G	2	
RI	2/4/13	1725											4				4	
601(7) WWT	2/4/13	1745											4				4	
601(8) WWT	2/4/13	1755											4				4	
TB	2/5/13	~~0800~~											2				2	
608 WWTFB		0830											2				2	
608 WWT		~~0835~~ 0835											4				4	
608 WWT Dup		0840											4				4	
608 WWT Dissolved		0845											4				4	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	CWS	2/5/13 @ 1340		TestAmerica	2/5/13 13:40
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	2/5/13 @ 13:45			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL	2/6/13 850

TAL 0018- 1 (04/10)

2/20/2013

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Duke Energy	Client Project Manager: Mike Wagner	Site Contact: T. Thomas	Lab Contact:	COC No: 59980
Address: Miami Ft. station	Telephone: 513 651 3440	Telephone: 513 314 8055	Telephone:	2 of 3 COCs
City/State/Zip: North Bend OH	Email: mike.wagner@duke-energy.com; tara.thomas@duke-energy.com	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:	Method of Shipment/Carrier:	TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		☐ Walk-in client ☐ Lab pickup ☐ Lab sampling
Project Name: Duke Miam. Ft. Lndfl 2013	Shipping/Tracking No:			Job/SDG No:
Project Number: 14951061				
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Lab Hg	Sample Specific Notes / Special Instructions:
Outfall 002 FB	2/5/13	0900											2		N	G	2	
Outfall 002	↓	0905											4		↓	↓	4	
Outfall 002 Dup	↓	0910											4		↓	↓	4	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

	Company	Date/Time		Company	Date/Time
Relinquished by:	WD	2/5/13 @ 1340	Received by:	TestAmerica	2/5/13 13:40
Relinquished by:	TestAmerica	2/5/13 @ 1345	Received by:		
Relinquished by:			Received in Laboratory by:		2/6/13 850

TAL 0018- 1 (04/10)

2/20/2013

TestAmerica Canton Sample Receipt Form/Narrative Login # : 20701

Client Duke Site Name _____ By: _____ (Signature)

Cooler Received on 2/6/13 Opened on 2/6/13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box ~~Client Cooler~~ Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water ~~None~~

1. Cooler temperature upon receipt

IR GUN# 1	(CF –2 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	☐ Multiple on Back
IR GUN# 4G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 5G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 8	(CF 0 °C) Observed Sample Temp. 14.6 °C	Corrected Sample Temp. 14.6 °C	

2. Were custody seals on the outside of the cooler(s)?	If Yes Quantity 1	Yes No
-Were custody seals on the outside of the cooler(s) signed & dated?		Yes No NA
-Were custody seals on the bottle(s)?		Yes No
3. Shippers' packing slip attached to the cooler(s)?		Yes No
4. Did custody papers accompany the sample(s)?		Yes No
5. Were the custody papers relinquished & signed in the appropriate place?		Yes No
6. Did all bottles arrive in good condition (Unbroken)?		Yes No
7. Could all bottle labels be reconciled with the COC?		Yes No
8. Were correct bottle(s) used for the test(s) indicated?		Yes No
9. Sufficient quantity received to perform indicated analyses?		Yes No
10. Were sample(s) at the correct pH upon receipt?		Yes No NA
11. Were VOAs on the COC?		Yes No
12. Were air bubbles >6 mm in any VOA vials?		Yes No NA
13. Was a trip blank present in the cooler(s)?	CHC	Yes No

Contacted PM_____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

High temp OK

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ______________________________ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 031512-HNO3; Sulfuric Acid Lot# 051012-H2SO4; Sodium Hydroxide Lot# 121809-NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? ______________

Client ID	pH	Date	Initials

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant

Analytical Laboratory Request Form (ARF)

(1) Complete all yellow sections of this form. Move through by striking the "TAB" key.	
(2) Save the file & e-mail to:	labcustomer@duke-energy.com
Questions / Problems Call:	704-875-5245

Customer Information

Name	Office Phone	Cell Phone
Mike Wagner	513 651 3440	NA
Fax	**e-Mail Address**	
513 651 3452	mike.wagner@urs.com	

Accounting Fields

*** Only complete if specific charging to capital or other special projects is needed. Include field type and specific field entry. ***	Field Type	Specific Field

Sampling Information

Sampling Personnel / Contractor	Scheduled Sampling Date	Date Sample Kit Needed
URS Field Staff Geologist / URS	2/ 4-5 /2013	2/1/2013

Shipping Address for Kit

Name	Phone	Mail Code
Mike Wagner	513 651 3440	NA
Street Address - street address and town needed	**State**	**Zip Code**
525 Vine Street Suite 1800, Cincinnati, Ohio 45202	Ohio	45202

Reporting

Report Due Date	Additional Reports - pdf file w/ Basic QC and EDD (spreadsheet) is Standard	
2/22/2013	Standard	
Report To (e-Mail Address 1)	**Report To (e-Mail Address 2)**	**Report to (e-Mail Address 3)**
mike.wagner@urs.com	tara.thomas@duke-energy.com	sue.wallace@duke-energy.com

Project Specifics

Project Name		Program Type
Miami Fort LL Hg 2013		NPDES Monitoring
Site, Location or Station	**State**	**Approximate Number of Days Sampling is Scheduled**
Miami Fort Station, Hamilton Co.	Ohio	2

Notes, Special Requests, Required Contract Lab to use, etc. **(LIMS Job Number-Duke Lab Provides)**

TestAmerica - North Canton, Ohio (contact - Denise Pohl) Note - Data report (prepared by URS) due to Miami Fort Station by end of month of sampling. February 2013 Event

Bottles	Matrix	Variables, Methods
8 (four vial package)	water	(seven locations) LL Hg (collected by method 1669, analysis by Method 1631)
		(one location) Dissolved LL Hg (0.45 micron, filtered at laboratory)(collected by method 1669, analysis by Method 1631)
3 field blanks	water	LL Hg (collected by method 1669, analysis by Method 1631)
1 trip blank	water	LL Hg (Method 1631)

Jan 09